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SCULLY SCOTT MURPHY & PRESSER, PC
400 GARDEN CITY PLAZA
SUITE 300
GARDEN CITY, NY 11530

EXAMINER	
BEHNAMIAN, SHAHRIAR	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/586,461	KOMATSU, MASAHIRO	
	Examiner	Art Unit	
	SHAHRIAR BEHNAMIAN	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the Applicant's communication filed on 25 November 2009.

Claims 1-12 are pending in this office action.

Applicant's arguments have been fully considered but they are not persuasive. For a response to the Applicant's arguments, please see the "Response to Arguments" section, below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pub. No. 2004/0162083 to Chen et al. ("Chen").

As per claim 1, Chen discloses a wireless communication system in which a transmitting end transmits packet data in block units (see Figs. 8-14 and associated text; and par. 0082; the data is transmitted in sub-packets (i.e. block units) and packets);

a receiving end transmits, to the transmitting end, a reception acknowledge signal when receiving the data successfully, whereas transmitting a negative acknowledge signal when not so (see Figs. 8-14 and associate text; par. 0082; if the first subpacket is received without error (using a CRC, for example), a positive Acknowledgement (ACK) is sent to the mobile station and no additional subpackets will be sent (recall that each subpacket comprises the entire packet information, in one form or another). If the first subpacket is not received correctly, then a Negative Acknowledgement signal (NAK) is sent); and

the transmitting end retransmits data based on the negative acknowledge signal (see Figs. 8-14 and associate text; par. 0082; the transmitting station can retransmit the negatively acknowledged subpacket, and hence the probability of correct reception increases as additional subpackets are received by the receiving end), the wireless communication system being characterized by comprising, at the receiving end thereof:

monitoring means for detecting that correct block data cannot be received even when a predetermined number of retransmissions of the block data is reached (see Figs. 8-14 and associated text; see pars. 0082, 0166 and 0190; the process of retransmitting subpackets may be repeated indefinitely, although it is common to specify a maximum number of subpackets, and once that number is reached the transmitter will discontinue and further retransmission of that subpacket); and

means for transmitting a reception acknowledge signal for other block data containing, as packet data, only packet data that belongs to the same packet as the packet contained in the block data detected by the monitoring means (see Figs. 8-14 and

associated text; see pars. 0082, 0166 and 0190; Those transmissions received in error will be NAKed, and retransmission will follow if the maximum number of retransmissions has not been reached. Those mobile stations for which a grant is not to be extended because they have reached the maximum allowable number of retransmissions will be transmitted an ACK. The process of retransmission then stops and a new and different subpacket can be transmitted).

As per claim 2, the preamble, 1st limitation and 2nd limitation are similar to those treated in the above rejection(s), and hence are met by the reference(s) as discussed the preamble, 1st limitation and 2nd limitation of claim 1.

Cheng further discloses that at the receiving end thereof, means for detecting that correct block data cannot be received even when a predetermined number of retransmissions of the block data is reached and giving a notification to that effect to the transmitting end (see Figs. 8-14 and associated text; see pars. 0082, 0166 and 0190; Those transmissions received in error will be NAKed, and retransmission will follow if the maximum number of retransmissions has not been reached. Those mobile stations for which a grant is not to be extended because they have reached the maximum allowable number of retransmissions will be transmitted an ACK. The process of retransmission then stops and a new and different subpacket can be transmitted); and

at the transmitting end, transmission control means for performing control to inhibit transmission of block data containing, as packet data, only packet data that belongs to the same packet as that contained in the block data, in response to the

notification (see Figs. 8-14 and associated text; see pars. 0082, 0166 and 0190; by receiving an ACK, the transmitting end will stop retransmission of the same packet).

As per claim 3, Cheng discloses a system characterized in that the transmission control means discards the packet data contained in the block data (see Figs. 8-14 and associated text; see pars. 0082, 0166 and 0190; once an ACK has been received by the transmitting end, the transmitting end stops retransmission of same subpacket and will transmit the next, a new, subpacket and hence discard the previously acknowledged subpacket from the transmission queue).

As per claim 4, Cheng discloses a system characterized in that the notification contains a number of the block data or a number of packet data contained in the block data, and the transmission control means controls the block data transmission based on the block data number or the packet data number (see Figs. 8-14, 16 and associated text; see pars. 0082, 0166, 0190 and 0193; Steps 1610 and 1615 may be carried out simultaneously, or sequentially without respect to order. The functions of monitoring the HARQ channel and grant channels may be interrelated. Received ACKs and NAKs (and ACK-and-Continue) are received with an associated delay, furthermore they are associated with a transmission and reception order and number; and hence the subpackets are identified by a number that sets them apart from each other, and are controlled (i.e. notification, transmission, retransmission, etc.) based on the number that they are associated with).

As per claims 5 and 9, the limitations are similar to those treated in the above rejection(s), and hence are met by the reference(s) as discussed claim 1.

As per claims 6, 10 and 11, the limitations are similar to those treated in the above rejection(s), and hence are met by the reference(s) as discussed claim 2.

As per claims 7 and 12, the limitations are similar to those treated in the above rejection(s), and hence are met by the reference(s) as discussed claim 3.

As per claim 8, the limitations are similar to those treated in the above rejection(s), and hence are met by the reference(s) as discussed claim 4.

Response to Arguments

1. Regarding claims 1, 5 and 9, Applicant argues on pages 2 and 3 of the Remarks that the prior art of record by Chen does not disclose "means for transmitting a reception acknowledge signal for other block data containing, as packet data, only packet data that belongs to the same packet as the packet contained in the block data detected by the monitoring means." However, the Examiner respectfully disagrees. According to this claim's interpretation, Chen discloses that those transmissions received in error will be NAKed, and retransmission will follow if the maximum number of retransmissions has not been reached. Those mobile stations for which a grant is not to be extended because they have reached the maximum allowable number of retransmissions will be transmitted an ACK. The process of retransmission then stops and a new and different subpacket can be transmitted. Chen discloses the retransmitted subpackets belong to the packet which had not been fully acknowledged.

2. Regarding claims 2, 6, 10 and 11, Applicant argues on page 3 of the Remarks that the prior art of record by Chen does not disclose "at the transmitting end, transmission control means for performing control to inhibit transmission of block data containing, as packet data, only

packet data that belongs to the same packet as that contained in the block data, in response to the notification." However, the Examiner respectfully disagrees. According to this claim's interpretation, Chen discloses that those transmissions received in error will be NAKed, and retransmission will follow if the maximum number of retransmissions has not been reached. Those mobile stations for which a grant is not to be extended because they have reached the maximum allowable number of retransmissions will be transmitted an ACK. The process of retransmission then stops and a new and different subpacket can be transmitted. Chen discloses to discontinue the retransmission of subpackets, belonging to the packet which had previously not been fully acknowledged, after the reception of an ACK. The transmitted ACK signal from the receiving end could be a result of a correct reception and/or a decision as to discontinue retransmission (e.g. when the max. number of retransmissions has been reached).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Note: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAHRIAR BEHNAMIAN whose telephone number is (571)270-3197. The examiner can normally be reached on 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KENT CHANG can be reached on (571)272-7667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SHAHRIAR BEHNAMIAN/
Examiner, Art Unit 2617

/Kent Chang/
Supervisory Patent Examiner, Art Unit 2617